

CLAIMS

What is claimed is:

1. A device for generating a composite movement comprising, in a first movement section (L1) a linear movement running in a longitudinal direction (4) and, in a subsequent second movement section (L2), a predetermined transverse movement (40) including a component perpendicular to the longitudinal direction (4), said device comprising a linear member (2) movably guided in the longitudinal direction (4) and a transverse member (6) movably guided on the linear member (2) along a compensatory movement path (12), said compensatory movement path (12) including directional components in said longitudinal direction (4) and perpendicular thereto, and said transverse member (6) being mechanically forcibly guided within said second movement section (L2) of said linear member (2) in order to execute a relative displacement in said longitudinal direction (4) between said transverse member (6) and said linear member (2) such that, as a consequence of a kinematic superposition of the linear movement and a forcibly guided movement along said compensatory movement path (12), the predetermined transverse movement of said transverse member (6) results.
2. The device as claimed in claim 1, characterised in that the transverse movement is straight and runs at a predetermined angle β to the longitudinal direction (4).
3. The device as claimed in either of claims 1 or 2, characterised in that the compensatory movement path (12) runs in a straight line.

4. The device as claimed in any of the preceding claims, characterised in that the transverse movement runs perpendicular to the longitudinal direction (4).
5. The device as claimed in any of the preceding claims, characterised in that the compensatory movement path (12) runs in a straight line at 45° to the longitudinal direction (4).
6. The device as claimed in claim 5, characterised in that the transverse member (6) is forcibly guided in such a way that, within the second movement section (L2) of the linear member (2) it remains absolutely still in the longitudinal direction (4), so that, relative to the linear member (2), it is displaced in the longitudinal direction (4), corresponding to the linear movement thereof, but in the opposite direction.
7. The device as claimed in any of the preceding claims, characterised in that the transverse member (6) is forcibly guided by means of a slide rod (18).
8. The device as claimed in claims 6 and 7, characterised in that the slide rod (18) is, at a first end, pivotably connected to the transverse member (6) and, at a second end, guided by means of a stationary guide path (26), having one part (28) running in the longitudinal direction (4), corresponding to the first movement section (L1), and one part (32) running perpendicular to the longitudinal direction (4), corresponding to the second movement section (L2).
9. The device as claimed in claim 8, characterised in that a curved transition portion (30) is provided between the first part (28), running in the longitudinal direction, and the second part (32), running perpendicular to the longitudinal direction.

10. The device as claimed in either of claims 8 or 9, characterised in that the second end of the slide rod (18) is pivotably connected to a free end (16a) of a pivoting lever (16) which is mounted on the linear member (2) and is connected in a torsionally resistant manner to a control lever (22), the free end of which is guided in the guide path (26).
11. The device as claimed in any of the preceding claims, characterised in that a holding and/ or gripping means (36) is arranged on the transverse member (6) for holding, picking up and/or putting down an article.